

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing mast Traffic Control Signal at the intersection of US 1 (Rhode Island Ave) and 34th Street / Perry Street / Municipal Place in Prince George's County. Queuing loops shall be installed on southbound US 1 south of the Mount Rainier Roundabout. When these loops detect a queue on southbound US 1 they shall signal the controller to stop southbound US 1 traffic at the intersection and allow Municipal Place bus traffic to proceed. This will prevent the traffic queue from blocking the roundabout. US 1 (Rhode Island Ave) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- The intersection shall continue to operate in a NEMA three-phase, semi-actuated mode, with the US 1 (Rhode Island Ave) approaches running concurrently. The pedestrian phase with pushbutton actuation shall remain in operation across the north leg of US 1 (Rhode Island Ave). The Municipal Place approach shall also continue to run in its own phase.
- The existing full-traffic-actuated, eight-phase controller with two (2) four-channel, rack mount loop detector amplifiers and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7652 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

The contact persons for District #3 (Prince George's County) and SHA are as follows:

Ms. Felecia Murphy
Assistant District Engineer - Traffic
Phone: (301) 513-7424

Mr. Vernon Stinnett
District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Victor Grafton
Assistant District Engineer - Utility
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Ed Rodenhizer
Manager, Signal Operations Section
410-787-7652

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

THERE IS NO EQUIPMENT TO BE SUPPLIED BY THE SHA.

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1002	Maintenance of traffic per assignment.	1 EA
8010	1" detector sleeve galvanized or flexible liquid tight conduit.	24 L.F.
8013	Schedule 80 rigid PVC conduit up to 4" - bored.	270 L.F.
8015	Schedule 80 rigid PVC conduit up to 4" - trenched.	180 L.F.
8018	Furnish and install electrical handhole.	4 EA
8020	Loop wire encased in flexible tubing (No. 14 AWG).	910 L.F.
8021	Saw cut for signal (loop detector).	225 L.F.
Neg.	5" concrete sidewalk.	50 S.F.
Neg.	Remove sidewalk.	50 S.F.
Neg.	Electrical cable - 2 conductor (aluminum shielded)	1200 L.F.

C. EQUIPMENT TO BE REMOVED

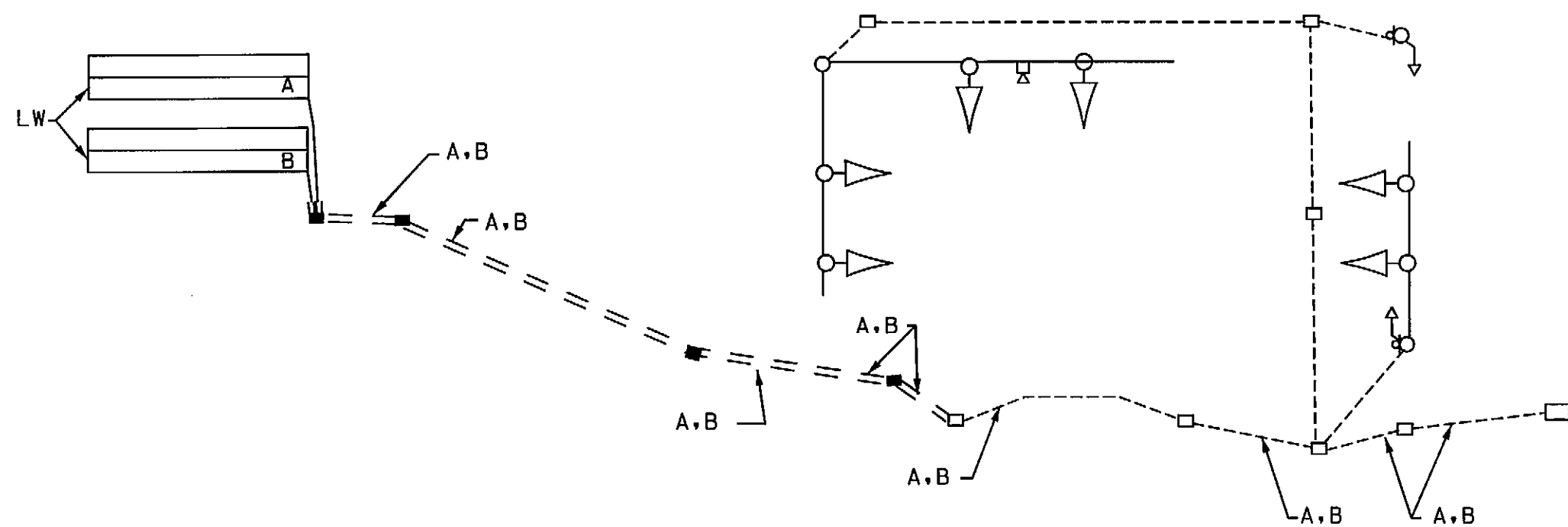
There is no signal equipment to be removed for this project.

PHASE CHART

	1	2	3	4	5	6	7	8
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(DW) (DW) (DW)	(DW) (DW) (DW)
PHASE 2 & 6	G	G	G	G	R	R	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	R	R	DW	DW
PHASE 4	R	R	R	R	G	G	DW	DW
4 CHANGE	R	R	R	R	Y	Y	DW	DW
PHASE 4 ALT	R	R	R	R	G	G	WK	WK
PED CLEARANCE	R	R	R	R	G	G	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK

NOTE: WHEN QUEUEING LOOPS SOUTH OF MOUNT RAINIER ROUNDABOUT MAKE CALL TO CONTROLLER. THE SIGNAL SHALL OPERATE IN PHASE 4 SO THAT QUEUES THROUGH THE ROUNDABOUT CAN BE CLEARED.

WIRING DIAGRAM



TOD NO: XX656-09
SHA NO: PG771B58
US 1, 34th Ave/Perry Street

WIRING KEY

A } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED

EL- LOOP WIRE (NO. 14 A.W.G.) EXISTING

LW- LOOP WIRE (NO. 14 A.W.G.)

ES- EXISTING UNDERGROUND SERVICE TO BE MAINTAINED BY PEPCO

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

**US 1 (RHODE ISLAND AVE) AND
34TH AVE/PERRY STREET/MUNICIPAL PLACE**

MOUNT RAINIER, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 10/14/11 CONTRACT NO. X6565185

DESIGNED BY R.R.Z. COUNTY PRINCE GEORGE'S
DRAWN BY R.C. LOGMILE 16000100.16
CHECKED BY 17/11 TMS NO. L077
F.A.P. NO. TOD NO.

TS NO. 1123E DRAWING NO. 2 OF 2 SHEET NO. OF

ST
STREET TRAFFIC STUDIES, LTD.
400 Craft Hwy., NW
Glen Burnie, MD 21061
PH (410) 590-5500
Fax (410) 590-6637
602561.DGN